Attorney Docket No. 200316513-4

## REMARKS

## In the Claims

Claims 1-9 are amended herein. Applicant contends that the amendments are supported by the Specification as filed and thus do not constitute new matter.

#### Claim Objections

Claims 5 and 6 were objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependant claims. Applicant has amended claims 4-6 to remove improper multiple dependencies. Applicant thus respectfully requests reconsideration and withdrawal of the objection, and allowance of claims 4-6.

# Double Patenting Rejection

Claims 1-4 and 7-10 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-3, 6 and 12-15 of copending U.S. Application No. 10/557,405. Noting that the appropriateness of a provisional non-statutory double patenting rejection will depend upon the ultimate language of the claims, Applicant contends that it is premature to address a provisional rejection under the judicially created doctrine of obviousness-type double patenting until the claims are indicated as being allowable but for the double patenting rejection. Applicant thus respectfully requests that the rejection be held in abeyance until allowable subject matter is indicated, at which point Applicant will take appropriate action to overcome the rejection.

# Claim Rejections Under 35 U.S.C. § 102

#### Claims 1-3 and 7-10

Claims 1-3 and 7-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Knauerhase et al. (U.S. Patent No. 6,345,303).

Claim 1 is amended to recite, in part, "where the presence of the destination identifier is detected, forwarding the message to the processing system identified thereby via the appropriate

Serial No. 10/577,844

Title: METHOD AND APPARATUS FOR LOAD-BALANCING

connection; otherwise detecting in the extracted message a message identifier for identifying related messages; searching a database of message identifiers for which no destination identifiers were detected, the database having information indicating to which one of the available processing systems each such message having no destination identifier was forwarded; determining a destination processing system for processing the message; inserting into the message an identifier identifying the determined destination processing system; and forwarding the message to the processing system via the appropriate connection." Thus, Applicant's claim 1 recites one act if the presence of the identifier is detected, and an alternate act if the presence of the identifier is not detected. Knauerhase et al, fails to teach or render obvious this combination of elements. In particular, while Knauerhase et al. discusses a variety of methods for selecting a destination device, there is no discussion of forwarding a message to a destination processing system if the message contains an identifier identifying that processing system, and only determining a destination processing system for processing the message if the message does not contain such an identifier. In fact, Knauerhase et al. expressly teaches an operation to determine a destination address 66 from a request 60, and then dynamically determining a new destination address 66' for insertion in the reformatted request 60' prior to forwarding. Knauerhase et al., column 7, line 51 through column 8, line 5. As the reformatted request 60' replaces the original destination address 66 with destination address 66', such operation would be directly contrary to Applicant's claim 1. Applicant further notes that no other treatment of a request by Knauerhase et al. is disclosed which does not replace the original destination address. Applicant thus contends that Knauerhase et al. expressly teaches away from Applicant's claim 1.

Furthermore, Applicant contends that Knauerhase et al. fails to teach or render obvious searching a database of message identifiers for which no destination identifiers were detected if no destination identifier is detected in the message, the database having information indicating to which of the available processing systems each such message having no destination identifier was forwarded

In view of the foregoing, Applicant contends that claim 1 is patentably distinct from the cited reference. Using similar reasoning, Applicant contends that claim 7 is also patentably distinct from the cited reference. For example, claim 7 recites, in part, "a message analyzer for detecting in the received message the presence of a destination identifier identifying one of the available processing systems and the presence of a message identifier for identifying related

#### RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 10/577,844

Title: METHOD AND APPARATUS FOR LOAD-BALANCING

messages; a database for storing details of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems each such message having no destination identifier was forwarded; and a message forwarder for forwarding the message, via the appropriate connection, to the processing system identified-by the destination identifier if the presence of a destination identifier is detected, and to a processing system to which a related message was forwarded if the presence of a destination identifier is not detected and the message identifier is contained in the database." Thus, claim 7 also contains the elements for taking one action if a destination identifier is detected and other actions if it is not detected, and contains a database for storing details of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems each such message having no destination identifier was forwarded.

As claims 2 and 3 include all patentable elements of claim 1, and claims 8-10 include all patentable elements of claim 7, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b), and allowance of claims 1-3 and 7-10.

#### Claims 7, 9 and 10

Claims 7, 9 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Masters (U.S. Patent No. 6,473,802).

Claim 7 is amended to recite, in part, "a database for storing details of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems each such message having no destination identifier was forwarded; and a message forwarder for forwarding the message, via the appropriate connection, to the processing system identified by the destination identifier if the presence of a destination identifier is detected, and to a processing system to which a related message was forwarded if the presence of a destination identifier is not detected and the message identifier is contained in the database." Applicant contends Masters fails to teach or render obvious at least this combination of elements of Applicant's claim 7. In particular, Masters fails to teach or suggest forwarding a message to a processing system to which a related message was forwarded if the presence of a destination identifier is not detected in the message and the message identifier is contained in a database for storing details of message identifiers for which no destination identifier was

Serial No. 10/577.844

Title: METHOD AND APPARATUS FOR LOAD-BALANCING

detected along with information indicating to which of the available processing systems each such message having no destination identifier was forwarded.

The Office Action contends that such elements are taught by Masters as a mapping between a client's IP address and the IP address of a server that provided access to resources. Office Action, page 15, first and second full paragraphs. However, such mapping is generated from server responses, and thus does not indicate to which processing system a message was forwarded, but indicates to which client a response was sent. See, e.g., Masters, Figure 3A, elements 150, 152. This is a significant difference. In particular, Applicant has taught that if a server is slow to respond, a message may be retransmitted or a CANCEL message may be transmitted before the server makes its response. If the mapping table relies on responses for its mapping generation, it is incapable to properly routing a retransmitted or CANCEL message if the server has not yet responded as no mapping information would yet be generated. Thus, this distinction that the database contain information related to where a message was sent if it did not contain a destination address is important and patentably distinct from the discussion in Masters. In addition, Masters notes that client IP addresses may not be unique and a given client may be associated with different IP addresses. Masters, column 1, line 66 through column 2, line 17. Thus, even if a mapping between a client's IP address and the IP address of a server that provided access to resources were to be generated prior to the response from the server, such mapping would not provide an indication of related messages as recited in Applicant's claim 7 as wholly unrelated messages could propagate from a single IP address. Accordingly, Applicant contends that the direct mapping of destination address to a client address as discussed in Masters does not teach or render obvious such elements of Applicant's claim 7.

In view of the foregoing, Applicant contends that claim 7 is patentably distinct from the cited reference. As claims 9 and 10 include all patentable elements of claim 7, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b), and allowance of claims 7, 9 and 10.

Serial No. 10/577.844 Title: METHOD AND APPARATUS FOR LOAD-BALANCING

PAGE 9 Attorney Docket No. 200316513-4

Claim Rejections Under 35 U.S.C. § 103

#### Claims 1-3 and 8

Claims 1-3 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Masters in view of Luther et al. (U.S. Publication No. 2003/0023877).

Applicant contends that it has shown claim 7 to be patentably distinct from the primary reference of Masters. For similar reasoning, Applicant contends that claim 1 is also patentably distinct from the primary reference of Masters as Masters does not teach or render obvious at least the elements of searching a database of message identifiers for which no destination identifiers were detected, the database having information indicating to which of the available processing systems each such message having no destination identifier was forwarded. Furthermore, the secondary reference of Luther et al. is not purported to cure the deficiencies of amended claim 7 as noted by Applicant, and Applicant contends that it cannot do so. In a similar manner, Applicant contends that Masters in view of Luther et al. would also fail to teach or render obvious the elements of amended claim 1. Applicant thus contends that claims 1 and 7 are patentably distinct from the cited references, taken either alone or in combination. As claims 2 and 3 include all patentable elements of claim 1, and claim 8 includes all patentable elements of claim 7, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a), and allowance of claims 1-3 and 8.

#### Claims 11 and 13

Claims 11 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Masters in view of Olson et al. (U.S. Publication No. 2004/0205192).

Applicant contends that it has shown claim 7 to be patentably distinct from the primary reference of Masters. Furthermore, the secondary reference of Olson et al. is not purported to cure the deficiencies of amended claim 7 as noted by Applicant, and Applicant contends that it cannot do so. Applicant thus contends that claim 7 is patentably distinct from the cited references, taken either alone or in combination. As claims 11 and 13 include all patentable elements of claim 7, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a), and allowance of claims 11 and 13.

Attorney Docket No. 200316513-4

PAGE 10

Title: METHOD AND APPARATUS FOR LOAD-BALANCING

#### Claim 12

Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Masters in view of Gilleland (U.S. Publication No. 2002/0073203).

Applicant contends that it has shown claim 7 to be patentably distinct from the primary reference of Masters. Furthermore, the secondary reference of Gilliland is not purported to cure the deficiencies of amended claim 7 as noted by Applicant, and Applicant contends that it cannot do so. Applicant thus contends that claim 7 is patentably distinct from the cited references, taken either alone or in combination. As claim 12 includes all patentable elements of claim 7, this claim is also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a), and allowance of claim 12.

## Claim 14

Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Masters in view of Luther as applied in claim 1 and further in view of Olson et al.

Applicant contends that it has shown claim 7 to be patentably distinct from the primary reference of Masters. Furthermore, the secondary reference of Olson et al. is not purported to cure the deficiencies of amended claim 7 as noted by Applicant, and Applicant contends that it cannot do so. Applicant thus contends that claim 7 is patentably distinct from the cited references, taken either alone or in combination. As claim 14 includes all patentable elements of claim 7, this claim is also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a), and allowance of claim 14.

Title: METHOD AND APPARATUS FOR LOAD-BALANCING

Serial No. 10/577,844

PAGE 11 Attorney Docket No. 200316513-4

CONCLUSION

# Claims 1-9 are amended herein. Claims 1-14 are currently pending.

In view of the above remarks, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No. 08-2025.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2204.

Respectfully submitted,

Reg. No. 40,697

Attorneys for Applicant HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Rd. Fort Collins, CO 80527-2400